

PARUL UNIVERSITY
FACULTY OF PHARMACY
B. Pharm. Winter 2018 - 19 Examination

Semester: 1
Subject Code: BP104T
Subject Name: Pharmaceutical Inorganic Chemistry -- Theory

Date: 17/12/2018
Time: 10:00 am to 1:00 pm
Total Marks: 75

Instructions:

1. Figures to the right indicate maximum marks.
2. Make suitable assumptions wherever necessary.

Q.1 Multiple Choice Questions (MCQs) (1 Mark Each)**(20)**

1. Lugol's solution is composed of

a) Iodine	b) Iodine and Potassium iodide
c) Iodine and potassium iodate	d) Iodine and alcohol
2. Diphenyl thiocarbazon is used in the limit test of

a) Lead	b) Arsenic
c) Sulphate	d) Chloride
3. Calcium gluconate is prepared by

a) Lactic acid and CaCO_3	b) Gluconic acid and CaCO_3
c) Oxalic and CaCO_3	d) Gluconic acid and Ca(OH)_2
4. Which of the following is anticaries agent ?

a) NaF	b) Fluoride
c) Stannous fluoride	d) All of above
5. Radioactivity measured by which method ?

a) Giger muller counter method	b) Ionization chamber
c) Scientillation counter method	d) All of above
6. ^{131}I used for

a) Hypothyroidism	b) Hyperthyroidism
c) Carcinoma	d) All of above
7. Sodium chloride is assayed by

a) Precipitation titration	b) Iodimetric titration
c) Redox titration	d) Iodometric titration
8. A beta particle is

a) An electron	b) One neutron and one proton
c) Two neutrons and two protons	d) An X-ray emission
9. Impurities in pharmaceutical preparation possibly due to which of following source ?

a) Raw material	b) Manufacturing process
c) Chemical stability	d) All of above
10. First edition of Indian Pharmacopoeia was published in

a) 1933	b) 1955
c) 2000	d) 1966
11. In the limit test for chloride opalescence formed due to formation of

a) NH_4Cl	b) H_3AsO_4
c) AgCl	d) AgNO_3
12. Aluminium hydroxide gel is used as

a) Acidifiers	b) Protectives
c) Antacids	d) Adsorbents
13. Anemia is

a) Deficiency of potassium	b) Deficiency of magnesium
c) Deficiency of iron	d) None of above
14. Apart from Expectorant, Ammonium chloride is also used as

a) Haematinic	b) Antimicrobial
c) Acid-base equilibrium	d) None of above

15. In the limit test of Iron, Thioglycolic acid act as
- a)Oxidizing agent
c)Reducing agent
- b)Suspending agent
d)None of above
16. _____ is used in preparation of iodine from kelp.
- a)Magnesium salt
c)Potassium iodide
- b)Manganese dioxide
d)Sodium iodide
17. Bentonite is used as
- a)Absorbent
c)Cleaning agent
- b)Emulsifying agent
d)Acidifiers
18. Sodium bicarbonate can be assayed by
- a)Alkalimetry method
c)Redox titration
- b)Acidimetry method
d)Precipitation titration
19. Low serum potassium level condition called as
- a)Hypokalemia
c)Hypochloremia
- b)Hyponatremia
d)Hypernatremia
20. Chlorinated lime is also known as
- a)Calcium hydroxide
c)Calcium carbonate
- b)Slaked lime
d)Bleaching powder

Q.2 Long Answers (any 2 out of 3) (10 Mark Each)

(20)

1. Enlist methods for measurement of radioactivity. Discuss any two methods in detail.
2. Write sources of impurities in pharmaceutical substances in detail.
3. Define and discuss ideal properties of antacids and write a note on milk of magnesia.

Q.3 Short Answers (any 7 out of 9) (5 Mark Each)

(35)

1. Explain the principle of Arsenic limit test with reactions.
2. Explain physiological acid-base balance in detail.
3. Write the properties and assay of Sodium Thiosulphate.
4. Write brief note on antimicrobials and discuss the assay Hydrogen peroxide.
5. What are Saline cathartics? Discuss the preparation of Magnesium sulphate.
6. Write any two assay of following compounds.
(a) Calcium gluconate (b) Chlorinated lime (c) Ferrous sulphate
7. Write the preparation and uses of potassium iodide and Copper sulphate.
8. Define and enumerate types of antidote used in pharmacy and discuss preparation of any one antidote compound.
9. Discuss the applications of buffer in pharmaceutical systems.